

		STATE		P.I. NUMBER		SHEET NO.		TOTAL SHEETS	
		GA.		M004627		17		40	

BRIDGE REPAIR CONSISTS OF

EXPANSION JOINT REPLACEMENT ----- SPECIAL DESIGN
BEARING REPLACEMENT ----- SPECIAL DESIGN
DECK REMOVAL AND OVERLAY ----- SPECIAL DESIGN
EDGE BEAM REPLACEMENT ----- SPECIAL DESIGN
SHEAR STUD INSTALLATION ----- SPECIAL DESIGN
BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
REINFORCED CONCRETE APPROACH SLAB
30 FT. LENGTH ----- GA. STD. 9017M (6-93)
TRAFFIC CONTROL-
GENERAL NOTES, STANDARD LEGEND & MISC. DETAILS ----- GA. STD. 9100 (3-06)
TRAFFIC CONTROL DETAIL FOR LANE
CLOSURE ON MULTILANE DIVIDED HIGHWAY ----- GA. STD. 9106 (9-07)

TRAFFIC DATA

TRAFFIC ----- ADT = 58,570 (2013)
ADT = 87,855 (2033)
DESIGN SPEED ----- 70 MPH
TRUCKS ----- 15 %
24 HR TRUCKS ----- 20 %
DIRECTIONAL ----- 50 %

CONSTRUCTION SEQUENCE

STAGE 1
1. JACK BRIDGE VERTICALLY AT ABUTMENT 1 MINIMALLY (1/2" MAX.) TO REMOVE ALL LOADS FROM EXISTING BEARINGS 1-6 & 14-19.
2. REMOVE PORTIONS OF EXISTING BEARING COMPONENTS (AS DETAILED ON BRIDGE SHEET 8).
3. DRILL 1½" Ø HOLES IN EXISTING BENT CAP (AS DETAILED ON THE PLANS).
4. FILL IN VOIDS UBDER BEARINGS WITH NON-SHRINK GROUT AND FINISH TOP OF GROUT LEVEL WITH EXISTING BENT CAP.
5. INSTALL NEW BEARINGS (AS DETAILED ON THE PLANS).
6. LOWER BRIDGE TO FINAL ELEVATION.
7. REPEAT STEPS 1 THROUGH 6 AT ABUTMENT 4 FOR EXISITNG BEARINGS 1-6 & 14-19.
STAGE 2
8. STAGE TRAFFIC ACCORDING TO CONSTRUCTION STAGING SHEET & GEORGIA STANDARD TRAFFIC CONTROL DETAILS FOR STAGE 2 CONSTRUCTION.
9. PERFORM HYDRO-DEMOLITION ON PORTIONS OF EXISTING DECK, END EDGE BEAMS AND BACKWALL AT ABUTMENTS 1 & 4.
10. PERFORM HYDRO-DEMOLITION ALONG EACH BEAM TO FORM 12" X 12" POCKETS (AS DETAILED IN THE PLANS).
11. CLEAN EXISTING REINFORCEMENT.
12. PLACE NEW REINFORCEMENT AND INSTALL SHEAR STUDS (AS DETAILED IN THE PLANS).
13. FORM AND PLACE NEW CONCRETE FOR THE DECK, END EDGE BEAMS & THE BACKWALL AT ABUTMENTS 1 & 4.
14. REPLACE EXPANSION JOINTS (AS DETAILED ON BRIDGE SHEET 8) INCLUDING THOSE AT THE B.F.P.R.
STAGE 3
15. STAGE TRAFFIC ACCORDING TO CONSTRUCTION STAGING SHEET & GEORGIA STANDARD TRAFFIC CONTROL DETAILS FOR STAGE 3 CONSTRUCTION.
16. PERFORM HYDRO-DEMOLITION ON PORTIONS OF EXISTING DECK, END EDGE BEAMS AND BACKWALL AT ABUTMENTS 1 & 4.
17. PERFORM HYDRO-DEMOLITION ALONG EACH BEAM TO FORM 12" X 12" POCKETS (AS DETAILED IN THE PLANS).
18. REMOVE PORTION OF MEDIAN BARRIER (AS DETAILED ON BRIDGE SHEET 8).
19. CLEAN EXISTING REINFORCEMENT.
20. PLACE NEW REINFORCEMENT AND INSTALL SHEAR STUDS (AS DETAILED IN THE PLANS).
21. FORM AND PLACE NEW CONCRETE FOR THE DECK, END EDGE BEAMS, MEDIAN BARRIER & THE BACKWALL AT ABUTMENTS 1 & 4.

CONSTRUCTION SEQUENCE CONT'D

21. REPLACE EXPANSION JOINTS (AS DETAILED ON BRIDGE SHEET 8) INCLUDING THOSE AT THE B.F.P.R.
STAGE 4
22. CLEAN AND REPLACE CONSTRUCTION/DUMMY JOINTS (AS DETAILED ON BRIDGE SHEET 8).
23. REMOVE TRAFFIC CONTROL MEASURES AND OPEN BRIDGE TO TRAFFIC.
24. REPAIR DECK CONSTRUCTION JOINT SPALLS.
25. CLEAN AND SPOT PAINT AREAS OF EXISTING STEEL BEAMS.
26. CLEAN AND PAINT STEEL BEARINGS.
27. REPLACE BRIDGE STRIPING TO MATCH EXISTING.

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS.
REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.
CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
TRAFFIC CONTROLS - TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH GEORGIA DOT STANDARD 9106. SEE ROADWAY PLANS FOR TRAFFIC CONTROL PAYMENT.
SHOP DRAWINGS - WHEN SUBMITTING SHOP DRAWINGS FOR THIS PROJECT TO THE DOT GENERAL OFFICE, SUBMIT THEM TO THE BRIDGE MAINTENANCE UNIT.
EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:
HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX
THE ORIGINAL BRIDGE/ROADWAY WAS BUILT UNDER PROJECT NUMBER 1-75-3(24)305 AND WAS WIDENED UNDER PROJECT NUMBER 1R-75-3(154).
DIMENSIONS AND ELEVATIONS - VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO ORDERING MATERIALS OR BUILDING FORMS. LIGHT LINES INDICATE THE EXISTING STRUCTURE AND HEAVY LINES INDICATE THE NEW STRUCTURE.
EPOXY RESIN ADHESIVE - APPLY EPOXY RESIN ADHESIVE TYPE II TO ALL HARDENED CONCRETE SURFACES JUST PRIOR TO POURING THE CONCRETE FOR THE NEXT STAGE OF CONSTRUCTION, SEE SECTION 886 OF THE GEORGIA DOT SPECIFICATIONS. INCLUDE THE COST OF EPOXY ADHESIVE AND ITS APPLICATION IN THE OVERALL BID SUBMITTED.
EXISTING REINFORCEMENT - BEND EXISTING REINFORCEMENT TO BE UTILIZED IN NEW CONSTRUCTION IN A MANNER TO PROVIDE THE MAXIMUM LAP POSSIBLE OR AS SHOWN ON THE PLANS. THOROUGHLY CLEAN EXISTING REINFORCEMENT OF CONCRETE SCALE AND RUST BEFORE BONDING INTO NEW CONSTRUCTION.
GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.
WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.
EXISTING BRIDGE JOINTS - CLEAN EXISTING BRIDGE CONSTRUCTION AND DUMMY JOINTS OF ALL DIRT, REFUSE, AND EXISTING SEALANT AS PER SUB-SECTIONS 461.3.05.A OF THE GEORGIA DOT SPECIFICATIONS. SEAL JOINTS USING SILICONE SEALANT (TYPE D) AS PER SUB-SECTIONS 461.3.05.C AND 833.2.06 OF THE GEORGIA DOT SPECIFICATIONS.
JACKING OF EXISTING BRIDGE - SEE SECTION 518 OF THE GEORGIA DOT SPECIFICATIONS.
PAINT - CLEAN AND PAINT ALL NEW STRUCTURAL STEEL AND SPOT CLEAN AND PAINT EXISTING STRUCTURAL STEEL AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. USE PAINT SYSTEM VII FOR NEW STRUCTURAL STEEL AND SYSTEM VII/VII FOR EXISTING STRUCTURAL STEEL.
SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.
INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF CLEANING AND BENDING OF EXISTING REINFORCEMENT, WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

PAINTING NOTES

1. THE EXISTING STEEL STRUCTURE IS 190.5± FT. LONG WITH A TOTAL ESTIMATED AREA OF STEEL TO BE PAINTED OF 200 SF. PRIOR TO BIDDING, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEASURE AND VERIFY THE AREA OF STEEL TO BE PAINTED.
2. REPAIR ANY DAMAGES TO THE STRUCTURAL STEEL CAUSED BY THE BLAST CLEANING OR ANY OTHER RELATED OPERATIONS, AT NO CHARGE TO THE DEPARTMENT. ALL REPAIRS ARE TO BE APPROVED BY THE ENGINEER.
5. ALL CONCRETE & DECK WORK SHALL BE COMPLETED PRIOR TO STARTING PAINTING WORK.
6. THE COST OF PAINTING NEW AND EXISTING STRUCTURAL STEEL SHALL BE INCLUDED IN THE PRICE BID FOR PAINT EXISTING STEEL STRUCTURE.

DESIGN DATA

SPECIFICATIONS ----- AASHTO 17TH EDITION, 2002
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY B)
TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED
* FUTURE PAVING ALLOWANCE ----- 0 LBS PER SQ FT (ORIGINAL STRUCTURE)
14 LBS PER SQ FT (WIDENED STRUCTURE)
CONCRETE: SUPERSTRUCTURE ----- CLASS AA, f'c = 3,500 PSI
SUBSTRUCTURE ----- CLASS AA, f'c = 3,500 PSI
REINFORCEMENT STEEL: ----- GRADE 60, fy = 60,000 PSI
* FUTURE PAVING ALLOWANCE HAS BEEN REDUCED FROM ORIGINAL PLANS DUE TO INCREASE IN OVERLAY THICKNESS TO ACHIEVE REQUIRED DECK REBAR CLEARANCES.

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
449-1350	89	----	LF	PREFORMED SILICONE JOINT SEAL, BR NO - 1 LT, BENT 1
449-1350	89	----	LF	PREFORMED SILICONE JOINT SEAL, BR NO - 1 LT, BENT 4
449-1350	----	88	LF	PREFORMED SILICONE JOINT SEAL, BR NO - 1 RT, BENT 1
449-1350	----	88	LF	PREFORMED SILICONE JOINT SEAL, BR NO - 1 RT, BENT 4
461-2000	178	174	LF	RESEALING BRIDGE JOINTS, TP D
500-0100	1328	1328	SY	GROOVED CONCRETE
500-3002	99	92	CY	CLASS AA CONCRETE
501-2000	6692	5842	LB	STR STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - 1 LT (9162)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 RT (8810)
514-1000	LUMP	----	LS	EPOXY COATED SUPERSTR REINF STEEL, BR NO - 1 LT (1332)
514-1000	----	LUMP	LS	EPOXY COATED SUPERSTR REINF STEEL, BR NO - 1 RT (1286)
518-1000	LUMP	LUMP	LS	RAISE EXISTING BRIDGE, STA - 1686+36.01
519-0400	1294	1294	SY	CONCRETE OVERLAY, PORTLAND CEMENT, VARB THK
521-3000	8	6	SF	PATCHING CONCRETE BRIDGE
535-1005	LUMP	LUMP	LS	PAINT EXIST STEEL STRUCTURE, STA NO - 1686+36.01
540-1202	LUMP	----	LS	REMOVAL OF PARTS OF EXISTING BRIDGE, BR NO - 1 LT
540-1202	----	LUMP	LS	REMOVAL OF PARTS OF EXISTING BRIDGE, BR NO - 1 RT

UTILITIES

NO UTILITIES ON BRIDGE

EXISTING BRIDGE SERIAL NO. 015-0101-0
EXISTING BRIDGE I.D. NO. 015-00401D-299.66N
PROJECT P.I. NO. M004627
BRIDGE NO. 1 LT & RT

DATE

REVISIONS

BY

NOTE: INFORMATION TAKEN FROM ORIGINAL AND WIDENING PLANS.

DRAWING NO. 35 - 002

BRIDGE SHEET 2 OF 11

DESIGNED TBS

DRAWN TBS

CHECKED KAK

REVIEWED MS

BMU REVIEWED CLB

APPROVED BFR

STATE OF GEORGIA

DEPARTMENT OF TRANSPORTATION

ENGINEERING DIVISION - OFFICE OF BRIDGES AND STRUCTURES

GENERAL NOTES

I-75 OVER CEDAR CREEK ROAD (CR 179)

BARTOW COUNTY

P.I. NO. M004627

NO SCALE

SPETEMBER 2013

2013006 \ 2013006-002 \ BRIDGE \ M004627-GN.DGN